

## Ethylene Oxide Usage and Emissions

Sterigenics	Location
Emission Controls:	
Sterilizer	Deoxx
Aerations Rooms	Donaldson
Back Vents	Donaldson

Usage and Emissions:	2019	2018	2017	2016	2015
EtO Usage (lbs)	159,003	131,751	151,415	119,828	125,714
Sterilizer Control Effic. (%)	99.9500%	99.9500%	99.9500%	99.9500%	99.9500%
Aer. Room Control Effic (%)	99.9549%	99.8633%	99.9102%	99.6474%	99.7562%
Backvent Effic. (%)	99.9087%	99.8534%	99.9441%	99.7521%	99.9209%
EO Sterilizer Emissions (lbs)	76	63	72	57	60
EO Aeration Emissions (lbs)	3	7	5	17	12
EO Backvent Emissions (lbs)	1	2	1	3	1
EO Fugitive Emissions (lbs)	79.50	66	76	60	63
EO Accidental Releases (lbs):	0.00	0.00	0.00	0.00	5.20

TOTAL Stack EO Emissions (lbs)	79.85	71.72	78.21	76.79	72.97
TOTAL Fugitive EO Emissions (lbs)	79.50	65.88	75.71	59.91	68.06

EO Sterilizer Emissions (#) =  $0.95 * \text{EO Usage} * (1 - \% \text{control efficiency})$

EO Aeration Emissions (#) =  $0.04 * \text{EO Usage} * (1 - \% \text{control efficiency})$

EO Backvent Emissions (#) =  $0.01 * \text{EO Usage} * (1 - \% \text{control efficiency})$

EO Fugitive Emissions (#) =  $0.0005 * \text{EO Usage}$